UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,655	01/08/2002	Hidetaka Ito	8009-1001	9177

44987 7590 08/08/2005

HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER	
MARTIN, NICHOLAS A	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/038,655	ITO, HIDETAKA	
	Examiner	Art Unit	
	Nicholas Martin	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/8/02, 5/28/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-18 are presented for examination. Claims 11-18 have been added.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Response to Arguments

3. Applicant arguments filed on 04/25/2005 have been fully considered by they are not persuasive.

4. As per remarks, Applicant argued that (1) Kajitani does not disclose or suggest setting a plurality of PVC connections and individually corresponding controlling connections between two ATM exchanges of the ATM communication network.

5. As to point (1), Kajitani teaches setting a plurality of PVC connections and individually corresponding controlling connections between two ATM exchanges of the ATM communication network (Col. 2, lines 31-37 "...rerouting a PVC route on an ATM network...defining an alternate route for the PVC route which is managed in an ATM network...").

6. As per remarks, Applicant argues that (2) Kajitani does not disclose or suggest detecting, by each of the ATM exchanges, occurrence of or release from a trouble with a PVC connection through the corresponding controlling connection.

7. As to point (2), Kajitani teaches detecting, by each of the ATM exchanges, occurrence of or release from a trouble with a PVC connection through the corresponding controlling connection (Col. 2, lines 31-44 ""...rerouting a PVC route on an ATM network...defining an alternate route for the PVC route which is managed in an ATM network...switching the PVC route...alternate route when a fault occurs in a network element forming the PVC route... rerouting the PVC route ... determining an order of relief for a plurality of PVC routes...each PVC route previously holds when the fault occurs, and a step of rerouting the PVC route...").

8. As per remarks, Applicant argues that (3) Kajitani does not disclose or suggest that network elements detect trouble through a corresponding controlling connection.

9. As to point (3), Kajitani teaches network elements detect trouble through a corresponding controlling connection (Col. 2, lines 11-20; Col. 2, lines 31-44 "...alternate route for the PVC route which is managed in an ATM network managing system; and switching the PVC route to a previously defined alternate route when a fault occurs in a network element..."; Fig. 2; Col. 9, lines 15-21).

10. As per remarks, Applicant argues that (4) Kajitani does not disclose or suggest that a network management system is an ATM exchange.

11. As to point (4), Kajitani teaches that a network management system is an ATM exchange (Fig. 1; Col. 2, lines 34-38 "...PVC route which is managed in an ATM network managing system...switching the PVC route...alternate route when a fault

occurs..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

12. As per remarks, Applicant argues that (5) Kajitani does not disclose or suggest that each of network elements detects a trouble through receipt of an alarm indication signal cell from an operation administration and maintenance function.

13. As to point (5), Kajitani teaches that each of network elements detects a trouble through receipt of an alarm indication signal cell from an operation administration and maintenance function (Col. 2, lines 34-38 "...PVC route which is managed in an ATM network managing system...switching the PVC route...alternate route when a fault occurs..."; Col. 4, lines 12-17 "...ATM network resource managing unit for managing resources... a PVC connection managing unit...managing the situation of the connection of the PVC route; a PVC route searching unit for searching the PVC route..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

14. As per remarks, Applicant argues that (6) Kajitani does not disclose or suggest that each of the network elements detects a trouble through failure to receive a continuity check cell from an operation administration and maintenance function.

15. As to point (6), Kajitani teaches that each of the network elements detects a trouble through failure to receive a continuity check cell from an operation administration and maintenance function (Col. 2, lines 34-38 "...PVC route which is managed in an

ATM network managing system...switching the PVC route...alternate route when a fault occurs..."; Col. 4, lines 12-17 "...ATM network resource managing unit for managing resources... a PVC connection managing unit...managing the situation of the connection of the PVC route; a PVC route searching unit for searching the PVC route..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

16. As per remarks, Applicant argued that (7) Kajitani does not disclose or suggest setting a mater PVC connection and a master side operation administration and maintenance (OAM) connection corresponding to the master PVC connection between a first ATM exchange and a second ATM exchange.

17. As to point (7), Kajitani teaches setting a mater PVC connection and a master side operation administration and maintenance (OAM) connection corresponding to the master PVC connection between a first ATM exchange and a second ATM exchange (Fig. 1; Fig. 10; Col. 2, lines 31-44 "...rerouting a PVC route on an ATM network...defining an alternate route for the PVC route which is managed in an ATM network...switching the PVC route...alternate route when a fault occurs in a network element forming the PVC route... rerouting the PVC route ... determining an order of relief for a plurality of PVC routes...each PVC route previously holds when the fault occurs, and a step of rerouting the PVC route..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

18. As per remarks, Applicant argues that (8) Kajitani does not disclose or suggest setting a bypassing PVC connection prepared in advance for bypassing of the master PVC connection and a bypassing side OAM connection corresponding to the bypassing PVC connection between the first and second ATM exchanges.

19. As to point (8), Kajitani teaches setting a bypassing PVC connection prepared in advance for bypassing of the master PVC connection and a bypassing side OAM connection corresponding to the bypassing PVC connection between the first and second ATM exchanges (Fig. 1; Fig. 10; Col. 2, lines 31-44 "...rerouting a PVC route on an ATM network...defining an alternate route for the PVC route which is managed in an ATM network...switching the PVC route...alternate route when a fault occurs in a network element forming the PVC route... rerouting the PVC route ... determining an order of relief for a plurality of PVC routes...each PVC route previously holds when the fault occurs, and a step of rerouting the PVC route..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

20. As per remarks, Applicant argues that (9) Kajitani does not disclose or suggest switching a master PVC connection to a bypassing PVC connection if both eh first and second ATM exchanges detect a trouble of the mater PVC connection through the master side OAM connection.

21. As to point (9), Kajitani teaches switching a master PVC connection to a bypassing PVC connection if both eh first and second ATM exchanges detect a trouble of the mater PVC connection through the master side OAM connection (Fig. 1; Fig. 10;

Col. 2, lines 31-44 "...rerouting a PVC route on an ATM network...defining an alternate route for the PVC route which is managed in an ATM network...switching the PVC route...alternate route when a fault occurs in a network element forming the PVC route... rerouting the PVC route ... determining an order of relief for a plurality of PVC routes...each PVC route previously holds when the fault occurs, and a step of rerouting the PVC route..."; Col. 4, lines 12-17 "...ATM network resource managing unit for managing resources... a PVC connection managing unit...managing the situation of the connection of the PVC route; a PVC route searching unit for searching the PVC route..."; Col. 10, lines 16-41 "...alternate route when a fault occurs in the system...fault occurs in the ATM exchange...").

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

23. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kajitani et al. (hereinafter Kajitani), US 6,643,254.

24. As per claim 1, Kajitani teaches a PVC switching control method for controlling a PVC connection in an ATM communication network comprising:

setting a plurality of PVC connections and individually corresponding controlling connections between two ATM exchanges of the ATM communication network (Col. 2, lines 31-37); and

detecting, by each of the ATM exchanges, occurrence of and or release from a trouble with a PVC connection through the corresponding controlling connection (Col. 2, lines 31-44); and

switching an operative PVC connection to another one of the PVC connections in response to a result of the detection (Col. 2, lines 31-44).

25. As per claim 2, Kajitani teaches the PVC switching control method as claimed in claim 1, wherein, if, while one of the PVC connections is used as a currently used PVC connection, it is detected from the corresponding controlling connection that a trouble has occurred with the currently used PVC connection, then each of the ATM exchanges switched the operative PVC connection to another one of the PVC connections as a bypassing PVC connection (Col. 2, lines 31-44; Col. 10, lines 16-41).

26. As per claim 3, Kajitani teaches the PVC switching control method as claimed in claim 2, wherein, if, while the bypassing PVC connection is used, it is detected that the

currently used PVC connection has been released through the corresponding controlling connection, then each of the ATM exchanges switches the operative PVC connection to the currently used PVC connection (Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

27. As per claim 4, Kajitani teaches the PVC switching control method as claimed in claim 1, wherein the controlling connections are set by an operation administration and maintenance function (Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

28. As per claim 5, Kajitani teaches the PVC switching control method as claimed in claim 4, wherein each of the ATM exchanges detects trouble through receipt of an alarm indication signal cell of from the operation administration and maintenance function (Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

29. As per claim 6, Kajitani teaches the PVC switching control method as claimed in claim 4, wherein each of the ATM exchanges detects a trouble through failure to receive a continuity check cell from the operation administration and maintenance function (Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

30. As per claim 7, Kajitani teaches a PVC switching control method for controlling a PVC connection in an ATM communication network, comprising:

setting a mater PVC connection and a master side operation administration and maintenance (OAM) connection corresponding to the master PVC connection between a first ATM exchange and a second ATM exchange (Fig. 1; Fig. 10; Col. 2, lines 31-44; Col. 10, lines 16-41);

setting a bypassing PVC connection prepared in advance for bypassing of the master PVC connection and a bypassing side OAM connection corresponding to the bypassing PVC connection between the first and second ATM exchanges (Fig. 1; Fig. 10; Col. 2, lines 31-44; Col. 10, lines 16-41); and

switching, if both of the first and second ATM exchanges detect trouble of the master PVC connection through the master side OAM connection, the master PVC connection to the bypassing PVC connection at the first and second ATM exchanges (Fig. 1; Fig. 10; Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

31. Claim 8 does not teach or define any new limitations above claim 7 and therefore is rejected for similar reasons.

32. As per claim 9, Kajitani teaches the PVC switching control method as claimed in claim 7, wherein a plurality of repeating ATM exchanges are connected on a route of the bypassing PVC connection and a connection for forming the bypassing PVC connection is set in each of the repeating ATM exchanges (Fig. 1; Fig. 10; Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

33. As per claim 10, Kajitani teaches the PVC switching control method as claimed in claim 9, wherein each of the first and second ATM exchanges designates a connection set in advance and signals an ATM cell to a neighboring one of the plurality of repeating ATM exchanges through the designated connection (Col. 2, lines 31-44; Col. 4, lines 12-17; Col. 10, lines 16-41).

34. Claims 11-18 do not teach or define any new limitations above claims 1-10 and therefore are rejected for similar reasons.

Response to Amendment

35. Examiner acknowledges amendments to the specification, which now appears to be in conformance with MPEP § 608.01(g). Objection has been withdrawn.

36. Examiner acknowledges amendments to claims pertaining to 35 U.S.C. § 112, second paragraph. Objection has been withdrawn.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Martin whose telephone number is (571) 272-3970. The examiner can normally be reached on Monday - Friday 8:30 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3970.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Nicholas Martin
August 1, 2005